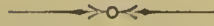


Beeston Urban District Council.



Officers:

MR. A. KIRKLAND, (Rate Collector and Assistant Overseer).

MR. W. H. REDGATE, (Clerk).

MR. E. A. BUSH, (Surveyor and Sanitary Inspector).

DR. F. ROTHERA, (Medical Officer of Health.)



Members:

MR. S. W. BANNISTER, J.P.

MR. J. R. ANDERSON.

MR. T. J. N. MEAKIN.

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„ GEO. PALING.

„ GEO. BURROWS.

„ W. H. PRATT, J.P.

„ J. BARNATT.

„ W. H. SPENCER.

„ G. W. BROUGH.

„ W. THUMS.

„ J. J. BYWATER.

„ S. W. WIDDOWSON.

„ GEO. HANDS.

„ J. W. WILSON.

ANNUAL REPORT

OF THE

Medical Officer of Health for the year 1911.

To the Chairman and Members of the Beeston
Urban District Council.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit to you my Annual Report, for the year ending, December 31st, 1911, this being my 19th Annual Report. It deals as usual, with the vital statistics and sanitary condition of the Parish. Year by year the memorandum which is sent out by the Medical Officer of the Local Government Board on the preparation of the annual reports of Medical Officers of Health increases in size, and their enlargement may be said to be an index of the additional duties which now devolve upon Sanitary Officers.

Natural and Social Conditions of the District.—The town of Beeston is built on a bed of gravel and gravel grit brought down by the river Trent superimposed on a sandstone rock. It has a gentle slope from the north to south extending from 212 feet above sea level at the top of Wollaton Road to 80 feet at the level of the Trent, which forms its southern boundary. This slope and the character of the subsoil afford ready drainage, but this is unfortunately counter-balanced by the liability of the lower parts of the township to flooding after excessive and prolonged rain. The total area of the district is 1586 acres, which gives a population of 7 per acre. The chief industries in the place are the manufacture of lace with its various subsidiaries, telephone works, foundry, horticultural builders and minor engineering works. The health conditions of these various industries compare favourably with other towns and leave little to be desired. There is no occupation in the district likely to produce lead poisoning and no obnoxious trades are carried on.

House Accomodation.—There is an abundance of house accomodation for all classes, no less than 221 having been unoccupied at the time the census was taken. The cottages inhabited by working people usually consist of a front room, kitchen, scullery, and three or four bedrooms. In some of the older parts of the town the cottages are smaller. In the majority of cases there is a fair sized garden at the back of each cottage. New houses are built strictly according to the bye-laws, the plans having been passed by the Building Committee. Particulars of the action taken under the Housing and Town Planning etc. Act, will be considered later. The rateable value of the Parish is £42,182 5s. od.; the assessable value £36,497. The General District rate is $\frac{3}{6}$ in the £ and the Poor- $\frac{3}{4}$ in the £.

Meteorological Conditions.—The phenominally hot and dry summer of 1911 had a bad effect upon the health of the community, leading to much diarrhoea and other intestinal disorders in persons of all ages, but more especially in young children. In previous Reports I have referred to the causes and reasons for this connection between heat and drought and such ailments, so need not do so again until dealing with these subjects later on. In consequence of Mr. Fellows leaving the district he asked me to take over the meteorological observations which he and his predecessor Mr. E. J. Lowe of Highfields had taken without interruption since 1840, and kindly supplied me with his set of instruments and back records. I may say I have derived much interest and instruction from carrying on this work, and have been fortunate to establish two records during my first year, viz :—the smallest quantity of rain in any one month .09 of an inch in July, and the highest temperature which occurred on August 9th, when the thermometer reached 94.5 in the screen. Moreover there were 36 days on which a temperature of over 80°F were recorded. A summary of observations will be found in the appendix.

Population.—Thanks to the census taken on April 2nd 1911, we have now definite data upon which to work. According to these figures the population on that date was 11,341, the number of houses in the Parish 2,949, out of which 221 were empty, leaving 2,728 occupied. This gives a proportion of inhabitants per house of $4\frac{1}{4}$ instead of $4\frac{1}{2}$ per house at the census of 1901. This difference of a $\frac{1}{4}$ per house is easily accounted for by the removal of Humbers to Coventry three years ago, prior to which time many houses were occupied by two families, and others had one or more lodgers. It will also account for my over estimation of population for 1910, which I figured out at 11,817, *i.e.* 476 above the census returns. An increase of 2,391 inhabitants since the census of 1901 is satisfactory considering the blow Beeston sustained in the removal of Humbers, Ltd.

During the year under review viz. 1911, there have been—

304	births and	118	deaths against	
309	"	117	"	in 1910
279	"	99	"	" 1909
317	"	111	"	" 1908
323	"	141	"	" 1907
278	"	118	"	" 1906
286	"	116	"	" 1905
300	"	155	"	" 1904
278	"	112	"	" 1903
267	"	97	"	" 1902
<hr/>		<hr/>		
294		118	Average for the 10 years.	

This gives a
Birth-rate of

26·8

26·1

24·7

26·7

26·8

24·1

26·4

28·

26·7

27·4

26·3

and a Death-rate of

10·4 per 1000 per annum for 1911

9·9 " " " 1910

8·7 " " " 1909

9·3 " " " 1908

11·7 " " " 1907

10·2 " " " 1906

10·7 " " " 1905

14·4 " " " 1904

10·7 " " " 1903

10· " " " 1902

10·6 Average for the 10 years.

Births.—Of the 304 births registered during the year, 141 were males and 163 females. Fifteen were illegitimate, 6 males and 9 females, a proportion of 1 to 20 legitimate births. A birth-rate of 26·8 very closely approximates to the average for the 10 years, viz. 26·3 and may now be looked upon as normal.

Deaths.—During the year there were 118 deaths of residents within the district, an increase of one on the previous year, 1910. This gives a death-rate of 10·4 per 1,000 per annum. Of these deaths 56 were males and 62 females. On 7 of them an inquest was held, and 5 were notified to the Coroner who certified the death as due to natural causes. In addition to these 118 deaths of "residents within the district." The Local Government Board now requires us to add the deaths of residents taking place outside the district. I am indebted to Dr. Handford the County Medical Officer of Health for the information that 20 of these occurred, viz. 6 in General Hospital Nottingham; 6 in Basford Workhouse; 2 in the Asylum, and 6 in other institutions or districts. The addition of these 20 deaths brings up the total to 138, with a "net" or corrected death-rate of 12·1 per 1000 per annum.

Of the total deaths :—

33	occurred during the 1st Quarter.
23	" " 2nd "
53	" " 3rd "
29	" " 4th "

The following are the causes of the deaths that occurred during the year (see Table III at the end of the Report), Enteric fever 2; Whooping cough 3; Diphtheria 1; Influenza 1; Phthisis 9; other Tuberculous diseases 6; Cancer 10; Bronchitis 13; Broncho-pneumonia 9; (all other forms) 1; other diseases of Respiratory organs 1; Diarrhœa and Enteritis 16; Nephritis and Brights disease 9; Diseases of Pregnancy and Parturition 2; Congenital Debility and Premature Birth 11; Violent deaths 5; Heart disease 7; Apoplexy 6; Other causes 21.

Zymotic or Epidemic Death-rate.—The number of deaths under this heading has been materially increased this year by the addition of 16 deaths from epidemic diarrhœa. These, with 3 from enteric fever, 3 from whooping cough, 1 from Diphtheria, and 1 from Influenza make a total of 23 zymotic deaths, and represents a zymotic death-rate of 2·02 per 1000 per annum, as compared with an average of 1·63 for the last 10 years.

The deaths may be tabulated as follows:—

	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902
Under 1 year ...	30	32	26	32	27	41	30	47	23	25
1 year and under 5 ...	14	15	6	9	24	16	15	17	5	9
5 years and under 15 ...	5	4	4	1	11	4	5	12	6	4
15 years and under 25 ...	7	1	3	6	4	4	5	7	6	5
25 years and under 65 ...	44	35	29	31	38	30	31	35	41	28
65 and upwards ...	38	30	31	32	37	23	30	37	31	25
	138	117	99	111	141	118	116	155	112	97

Of the 38 deaths occurring in persons over 65 years of age, 8 were between 65 and 70, 20 between 60 and 80 and 10 between 80 and 90.

Infantile Mortality.—In spite of the somewhat severe epidemic of diarrhœa which prevailed during the exceptionally hot and dry summer weather, the number of deaths in infants under 1 year of age is less than in the previous year when exactly the opposite atmospheric conditions prevailed. In the year under review 1911, 30 deaths under 12 months of age were registered. The highest figures during the past 10 years were 47 in 1904 and the lowest 23 in 1903. This gives an Infantile mortality rate of 98·6 per 1000 births registered. That is to say if 1000 children had been born in Beeston during the year, 98 would have died during the first year of their existence. The average for the previous ten years is 106·5.

Following my usual plan, I give in tabular form the cause of deaths in infants, and compare with the previous 10 years:—

	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902
Premature birth and										
Debility from birth ...	11	20	9	7	10	11	10	12	9	11
Bronchitis and Pneumonia ...	2	3	3	5	2	5	6	7	5	0
Convulsions ...	0	0	2	2	3	3	2	4	2	3
Constitutional Syphilis ...	0	2	1	0	1	0	2	0	0	0
General Tuberculosis ...	1	0	0	1	0	0	2	2	0	0
Diarrhœa ...	11	3	4	7	2	16	2	16	5	2
Tubercular Meningitis ...	0	1	1	1	1	0	2	3	2	3
Measles ...	0	0	0	3	2	0	0	0	0	0
Natural causes										
(coroner's enquiry) ...	2	0	0	1	2	2	0	1	0	2
Whooping cough ...	2	0	4	3	2	0	0	1	0	3
Other causes ...	1	4	2	2	2	4	4	1	0	1
	30	33	26	32	27	41	30	47	23	25

As is usually the case the number of deaths from Premature Birth and Debility from birth, viz. 11 represents a considerable proportion of the total number of 30 deaths. In previous Reports I spoke of these as being "unavoidable deaths," but this is not the case in all instances. Some of these delicate and prematurely born babies might, if proper and competent advice were forthcoming as to feeding and general management, pull through the first two or three months and ultimately make strong robust children. This is now being done in nearly all large towns and in many Urban Districts the size of Beeston, by the adoption of the notification of Birth's Act and its natural corollary, the appointment of a trained nurse to give the necessary instructions to young and inexperienced mothers. Arnold, Hucknall Torkard, Mansfield and Long Eaton have already adopted the Act, and appointed a nurse or health visitor with manifest advantage to the children of their districts and a reduction in the Infantile Mortality. The question of cost is, I know, the stumbling block to this, and other sanitary reforms, but the results would I am certain justify the means. The eleven deaths from diarrhœa will be considered when dealing with this subject.

Notifications.—The number of infectious diseases notified to me during the year was 35. In addition 6 cases of Phthisis occurring in Public Institutions, (General Hospital 4, Basford Workhouse 1, and Dispensary 1) were notified. Tabulated and compared with the previous ten years, they are as follows:—

	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902
Smallpox ...	0	0	0	0	0	0	0	2	0	0
Scarlet fever ...	23	21	21	5	13	53	22	31	24	45
Diphtheria ...	5	20	15	19	33	57	81	60	4	7
Croup ...	0	0	0	0	0	0	0	0	0	2
Typhoid fever ...	6	0	6	1	2	3	1	3	4	6
Erysipelas ...	1	4	6	7	9	6	10	7	4	1
Puerperal fever ...	0	0	1	1	0	0	0	0	0	0
	35	45	49	33	57	119	114	103	36	61

The average for the previous ten years is 65.

The following measures have been adopted and actions taken to check the spread of these Infectious diseases.

- (1) Adoption of Infectious Diseases Prevention Act, 1890.
- (2) Every case is immediately visited, and verbal and printed instructions are given as to the best method of isolating the patient, disinfectants are supplied, and the sanitary arrangements investigated.
- (3) A history of the case is taken, and all enquiries made as to the probable source of infection, such as contact cases, milk supply, correspondence, library books, etc.
- (4) Out work, such as lace mending etc., forbidden.
- (5) Other children in house not allowed to go to school, or to mix with other children in play.
- (6) Disinfection of house by compressed sulphurous acid gas by one of your sanitary officials on infection ceasing to exist.
- (7) Free supply of antitoxion serum to those who cannot afford to pay for it.

We have no Isolation Hospital, but in three urgent cases we were allowed to send the patients to the Nottm. Isolation Hospital at Bagthorpe on payment of costs. These amounted to £22 14s. 6d.

We are still handicapped in our disinfection by the want of a steam disinfecting chamber for the bedding and wearing apparel.

Smallpox.—For the eighth year in succession no case of this disease has been notified in Beeston. While this is satisfactory, I fear we are living in a fools' Paradise. With the increasing number of children escaping vaccination under the conscientious clause, an epidemic of this dire disease must inevitably come upon us sooner or later, and moreover the longer it is delayed, the greater will be the urgency and magnitude of the disaster. When such a crisis does occur, there would be great difficulty in vaccinating all the unprotected by reason of the limited supply of fresh vaccine lymph to be obtained at short notice, and the time at the disposal of the medical practitioners of the district. I mention these facts because it will only be by the instant detection and rigid isolation of the first case in our smallpox hospital, that any hope of aborting an epidemic can be hoped for. A suggestion has been made by one of the partners in the Rushcliffe Hospital for smallpox, that when not in use for its legitimate purpose it should be occupied by scarlet fever and diphtheria patients. This, in my opinion would be a great mistake and error in tactics, for the reason that it would defeat the main object of such an institution, which is to provide for the immediate reception of the *first* case. Our share of the expense of maintaining the hospital for the year is £35 14s. od.

Scarlet fever.—Twenty-three cases of this disease were notified, with no death. Sixteen houses were involved, five cases occurring in one house, three in another and two each in two others. This at first glance looks as if isolation were ineffective, but such is not the case because in every instance all the cases were notified at the same time. The type of scarlet fever seems to have quite altered in recent years, being of a much milder character. Indeed so mild are many of the cases that the disease is not recognised by the parents, and the patients are so little ill that medical advice is not called in until perhaps the peeling stage is reached. While this is satisfactory from the victims' point of view, it adds much to the difficulty of the sanitary officials in checking the spread of the disease, and still more in preventing the occurrence of odd cases arising. I can only urge upon the teachers in our elementary schools to keep a sharp look out upon the children under their charge, paying particular attention to their faces and hands for any sign of peeling. Should such cases occur the children ought to be sent straight home, and notification made to me. Two cases were removed to the Isolation Hospital at Bagthorpe by the courtesy of the Nottm. Health Authority, part of the expense being defrayed by the patients' parents.

Diphtheria.—That only five cases of this disease were notified during the year is eminently satisfactory, and very gratifying to me. Ever since 1904 when the epidemic suddenly began we have been striving to reduce the number of cases by every means in our power. Details of the measures taken to combat the disease have been explained in previous reports, particularly in that for 1905, so I need not recapitulate them. The throats of patients are still swabbed and submitted to bacteriological examination before return to school is allowed. Antitoxin under the "Diphtheria Antitoxin Order 1910" is still supplied by your Council to necessitous cases free of charge.

Typhoid or Enteric Fever.—In my last Report I referred to the fact that the cool wet summer of 1910 undoubtedly diminished the risk of this disease by lessening dust, by decreasing the number of flies, and by keeping the sewers well flushed. No cases were notified that year. I further added a warning note that so long as we were so dependent upon the dry method of excreta removal we must be apprehensive of this disease, if once started, spreading somewhat rapidly. This has happened during the year under review, viz. 1911, when 6 cases were notified, a somewhat large number for us. On analysing these cases I find four of them occurred in houses within a stone's throw of one another, or, to put it in a more up-to-date way of speaking, within a fly's flight of one another. In each case the houses were supplied with tub closets, and I have no doubt that it was by the agency of flies that infection was spread from one case to another. Immediately on a case of Enteric fever being notified a special galvanized iron pail with closely fitting lid is

supplied to the house for the reception of the infective excreta, and the pail is emptied daily and disinfected by one of your own sanitary staff. But unfortunately there is a period prior to notification, before the disease has definitely declared itself, during which the excreta are a source of danger, and for which the ordinary sanitary tub is used. This is the weak point of such a method of excrement disposal and under the atmospheric conditions prevailing during July, August and September I think we were fortunate not to have more cases than we had. In the first case notified there was a clear history of water-cress eating, which may, or may not, have been grown in polluted water. In no instance could the milk supply be suspected. Four of the cases were sent to the General Hospital at Nottingham, and two were treated at home. Two of the six cases died.

Erysipelas.—Only one case notified and calls for no comment.

Puerperal Fever.—That no case of this disease has been reported during the year speaks well for the care and attention given to the lying in women. Since the introduction of the Midwife's Act of 1902, no woman can practise as a midwife without undergoing a special course of training, and satisfying examiners in her proficiency to treat such cases, except those who were on the register prior to the passing of the Act. The old fashioned type of midwife who was not always scrupulously clean in her person or methods, and not too clever in her work is therefore doomed, and in her place has arisen highly trained women, competent to undertake any ordinary straightforward case, and quick to see danger and anticipate it, by sending for medical help if required.

NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles.—So far as I know as a general practitioner there has been an entire absence of this disease during the year. It is now three years since we had an epidemic of measles, and the time is rapidly approaching when we may expect an outbreak. Usually it commences among the very young children in the infant departments of the elementary schools, and it is therefore desirable to warn the teachers in these departments to be on the look-out for children showing signs of nasal catarrh, inflamed eyes, persistent cough, and rash about the face. Should such occur the child ought to be sent home at once. Unfortunately the infection of measles is early, even before the rash appears, and it is therefore impossible to prevent the disease from spreading in children, closely congregated together, as they are in schools. Should many cases occur, closure of the infant departments is the only feasible method of staying the epidemic.

Whooping-Cough.—Though never very prevalent accounted for 3 deaths, two in infants under 1 year, and 1 between 1 and 2 years of age. Few ailments cause so much discomfort to the patients themselves, as well as to their parents as this disease. Nor is it unattended by danger, so it behoves those having the charge of children to isolate them as much as possible when suffering from this disease.

Diarrhœa.—As I have already mentioned the phenomenal heat and drought of the recent summer months favoured the onset and spread of this disease, no less than 16 deaths having been recorded from epidemic diarrhœa. This is a heavy toll to pay for a fine summer. It cannot be too widely known that this type of diarrhœa is an acute infectious disease, the specific organism being conveyed principally by the agency of flies to any food left exposed or lying about. Such foods as milk or sugar which form the staple dietary of bottle fed infants are peculiarly attractive to the house fly which just previously may have been lavishing his attention upon a manure heap, rotten cabbage, or napkin soiled with the discharges from an infective infant. Hence mothers cannot be too careful in the safe removal of such sources of infection and above all, in keeping all articles of food, more especially milk, in a cool place, and protected from the visitation of this ubiquitous housefly. Undoubtedly improper feeding of the very young predisposes them to this disease, as does also the difficulty of keeping milk sweet and wholesome during very hot weather. Under such atmospheric conditions it cannot be too widely known that milk ought to be boiled on arrival night and morning and kept in stoppered bottles in a cool place. So important is this subject of diarrhœa and so fatal in its consequences that the Medical Officer of Health to the Local Government Board thought it desirable to issue a Memorandum on the subject in August last pointing out its dangers, the conditions which conduce to its spread, and the steps to be taken to safeguard the young from its perils. Unfortunately this did not arrive until too late to be of much service for the past summer, but with your permission I shall hope to consider and carry out the recommendations contained therein before another epidemic arises. This is one of the diseases that could be most ably controiled, under the Notification of Births Act, by the employment of a trained nurse to give instructions to young and inexperienced mothers in the art of feeding and general management of their offspring. As a sanitary authority without the adoption of this Act all we can do is to prevent the accumulation in or near the houses of decomposing animal and vegetable matter, to devote close attention to street and back yard scavenging, and to the removal of stable and domestic refuse in which flies can breed.

Phthisis or Consumption.—Ever since the discovery of Koch in 1882 that phthisis is due to the invasion and multiplication in the lungs and other organs of a specific organism, the tubercle bacillus,

it has been recognised by medical men that it came under the category of an infectious disease, and ought to be treated as such. Still in spite of this knowledge no steps were taken to make it notifiable until the year 1908 when the "Public Health (Tuberculosis) Regulations" made it obligatory for the Medical Officer of poor law institutions and districts to notify the Medical Officer of Health of such cases arising in their district. This was closely followed by the "Public Health (Tuberculosis in Hospitals) Regulations in 1911 extending the system of notification of cases occurring amongst the in or out patients at Hospitals or other similar institutions for the treatment of the sick. Now we have the final step in "the Public Health (Tuberculosis) Regulations, 1911" making it compulsory for every Medical Practitioner to notify every case of pulmonary tuberculosis occurring in the course either of his public or of his private practice.

This Act came into force on January 1st, 1912, and should have, if properly carried out, far reaching effects in stamping out, or considerably reducing the number of cases of this fatal and preventable disease. The mere fact of notification, though enabling accurate statistics to be compiled, will be of little avail unless combined with administrative action. With the help of sanatoria or dispensaries to be provided under the Insurance Act, coupled with the measures employed by the Local Health Authority through its Medical Officer it is hoped that the steady decline in the Death-rate from this disease; from 18.25 per 10,000 of population in 1891, to 10.93 in 1909, may be still further accelerated. The local measures to be adopted are:—

- (1) To keep accurate records of every case notified with regard to name, age, sex, number of family in house, number of rooms in house, cleanliness, dampness, surroundings, etc. Some of this dovetails with the Housing Act, the two Acts being complimentary to one another.
- (2) Educative measures in the form of verbal instructions and by printed cards (to be hung in the house) of simple directions of the precautions to be taken in the interests of the sick person himself, as well as the other inmates of the house.
- (3) The disinfection of the room occupied by the consumptive on his leaving the house or dying.

The Local Government Board make a strong point of the fact that the records kept by the Medical Officer of Health should be treated as strictly confidential documents, for whose custody the Medical Officer of Health is personally responsible.

The Following table shows our record for the last ten years.

	Phthisis.	Other tuberculous diseases.
1911	9	6
1910	10	4
1909	5	2
1908	7	8
1907	9	4
1906	6	2
1905	14	8
1904	17	4
1903	15	4
1902	11	7
	—	—
Average to 10 years	10.3	4.9

The death-rate from Phthisis alone is for the year 0.8, and for all tubercular diseases 1.3.

Milk Supply.—The question of milk supply is so closely associated with Phthisis and other tuberculous diseases that it had better be dealt with here. In previous Reports I have referred to the fact that human and bovine tuberculosis were due to one and the same organism, and could therefore be transmissible from one to the other. This occurs most frequently through the instrumentality of the milk which forms such an important part in the dietary of young children. In our inspection of the cowsheds we keep a sharp look-out for cows exhibiting signs of ill-health, such as emaciation, cough, and local sores on the udders and teats. Still neither your Sanitary Inspector nor myself are experts in veterinary science, and I still feel that every cow kept for milking purposes should be examined at least once a year by a veterinary surgeon for any evidence of tuberculosis. I feel most strongly also that urgent representations should be made to the dairy farmers to give their cows more light and air. Evidence of the advisability of this is becoming overwhelming and where it has been carried out the cattle are proved to be in better health, and the yield of milk is not lessened in quality or quantity. Other points that should be rigidly insisted upon are (1) the grooming and cleansing of a milking cow's flanks and tail; (2) the udder and teats also to be cleansed; (3) hands of milkers to be washed, and (4) a clean overall to be donned. All the cow-sheds, milk shops and dairies have been inspected twice during the year by your Sanitary Inspector and myself. The cow-sheds in some instances leave much to be desired in the point of construction, but more attention is being paid to general cleanliness both of them and their surroundings. The tenancy of one of the worst offenders expires in March, and we understand it is not to be renewed. Should this not be the case I think we should take drastic measures to ensure the necessary alterations being made before it is relet.

With regard to the milk shops and dairies we found little to find exception to. As a rule very little milk is stored on the premises, and in no single instance did we see milk exposed in open vessels on the counter. The dairies are well constructed, clean and cool, and the vessels spotlessly clean.

Meat and Food Inspection.—During our visits to the slaughter-houses, we take the opportunity of inspecting any carcasses recently killed for evidences of tubercle or other disease, and the Sanitary Inspector frequently visits butchers' and fish shops for the same purpose.

Water Supply.—Our water supply derived from the Nottingham Corporation is abundant and excellent in quality. It is pumped from deep wells in the bunter sandstone, and is delivered in a sparkling and cool condition. Even during the late hot and dry summer there was no curtailment in the supply. It is to this excellent supply of water that I principally ascribe our uniformly good bill of health.

Sewage Disposal and Scavenging.—For the last seven years no plans of new houses with middens or tub closet accomodation have been passed, where a public sewer exists, and in consequence the number of tubs that has to be taken to the farm is stationary, viz. 2,200.* The weekly collection of this large number, their removal to the farm, where they are emptied and cleansed and returning the same is done by your Sanitary Staff between the hours of 10 p.m. and 7 a.m. and costs your Council not less than £900 a year. It is therefore not only an unhygienic method of excreta disposal, but a costly one too, and in many instances the water carriage system might be adopted with due regard to economy, even if your Council defrayed half the cost of conversion which is permissible under the Public Health Acts Amendment Act. In consequence of numerous complaints having been made by householders of the imperfect cleansing of tubs, the foreman of the night soil men was interviewed by the Sanitary Committee and his excuse was that with the existing staff of men and horses it was impossible to get through the work, without in some instances emptying the contents of one tub into another. A careful estimate is now being made as to the maximum work that can reasonably be done, and in the meantime all the dry ash bins (some of which had previously been collected at night) are now allocated to the day men and deposited in the old gravel pit instead of being taken down to the farm. The whole of the year's night soil has been carted from the farm on to arable lands in the district. The old tip, which must have contained many thousands of loads has also been disposed of; much of it being quite free from organic matter was used for raising and widening the farm roads. A

*An exact calculation recently made shows that 2,099 pails are in actual use of which 57 have to be emptied twice a week. A further number of 94 occur in unoccupied houses making a grand total of 2,250.

new road extending to the farthest extremity of the farm has been substantially made, and all night soil is now to be deposited on a more distant site, further from the population, and far more suitable for the purpose.

The hours of pumping have been considerably extended in order to prevent any overflow of crude sewage into the Trent, and this, coupled with the increased area devoted to sewage irrigation, has had an appreciable effect upon our effluent.

The farm at present is being used as follows :—

Fallow and irrigation	19·66 acres
Mangolds	4·16 „
Oats and dills	2·75 „
Osiers	·34 „
Lucerne	·75 „
Roadways, night soil tip dykes, carriers and embankments	4·34 „
	<hr/> 32·00

The 3,000 osiers planted in March 1911, appear to be well rooted, and a further 3,000 will be planted within the next few weeks. At the annual sale of farm crops the mangolds realised a good price in consequence of the very dry summer. The total received after deducting expenses was £74 7s. od. or £18 per acre against £12 the previous year.

I regret to say that none of the remaining 16 insanitary middens have been converted during the year. I can only repeat that while one of these unsavoury and unhygienic structures remains in our midst, we are not doing our duty as a Sanitary Authority.

During the year under review there has been a slight increase in the number of new houses erected as compared with the previous year, 1910. The Council have approved the following plans :— dwelling houses 33, stable 1, Motor sheds 4, alterations and additions 6, factories and workshops 5. In the Poplars 9 houses have been demolished and two modern single-story lace factories erected on the site. Extensive additions have made to the Beeston Foundry Company Works, and also to the British L.M. Ericsons Telephone Works. 32 houses have been certified as being fit for occupation, after the drains had been subjected to the water test. In addition to Buildings, plans for 4 new streets on the Bramcote Road Building Estate have been approved and commenced, but no new houses have been started at present.

Nuisances.—The Sanitary Inspector has investigated and dealt with the following complaints during the year :—

Stopped up or defective drains and closets	16
Boiling offensive offal	1

Offensive water courses	4
Depositing objectionable refuse	4
Defective sink	1
Offensive smells from sewer man-holes	2
Stopped up gullies	5
Offensive manure heaps or pits	4
Offensive smells under dwelling house floors	2
Offensive Pigstyes	2
Various	22

None of these relate to factories and workshops, which are given elsewhere.

Taking into consideration the abnormally dry summer, the number of nuisance complaints compares very favourably with those of the previous year. This may be attributed to the constant supply of water, and also to frequently flushing the sewers, particularly at the higher parts of the Town.

Street Noises.—The Bye-law as given hereunder is now in operation in the district, and I understand has already been productive of good results.

“No person shall, for the purpose of hawking, selling, distributing, or advertising any article, shout, or use any bell, gong or other noisy instrument in any street or public place so as to cause annoyance to the inhabitants of the neighbourhood.”

Any person offending against the foregoing Bye-Law, shall be liable to a penalty not exceeding Forty Shillings.

The Housing and Town Planning Act, 1909.—In my last Report I entered into particulars as to the scope and object of this Act, so need not refer to it again. I find, however, I made a mistake in saying that the inspection only related to houses let at a yearly rental of £16 and under. Under Section 17 of the Act, which is the one that interests us as a Health Authority, no restriction as to rent is made, which means that any and every house in the parish can be inspected if deemed advisable. Several hitches occurred in the earlier part of the year which delayed progress with the working of the Act. On May 16th, Mr. E. A. Bush, our Surveyor and Inspector of Nuisances, was appointed my assistant, and our first duty was to learn what was being done in neighbouring districts, similarly situated to Beeston. A sub-committee was formed to decide on the properties to be examined, the necessary forms procured and printed, and consequently it was not until June that we actually commenced operations. Altogether thirty houses have been inspected, twenty in William Street, three in Station road, and seven in Pleasant Row. All those in William Street are back to back houses, and a block of six of them at the rear were in such a dilapidated condition that a closing order

with a view to subsequent demolition was made. The remaining fourteen are being structurally altered, and made habitable by arrangements with the trustees of the property. The three in Station Road were also in such a state of disrepair that an unopposed closing order was made. The seven in Pleasant Row have also had the necessary notices for making a closing order. Now that we have got into harness, I trust matters will go on more smoothly, and that this very necessary work will be accelerated.

Factories, Workshops, and Outworkers.—Two new single-storied factories have been erected during the year, making the total number in the parish exactly 50. All these have been inspected by the Sanitary Inspector and myself on at least three occasions during the year. Both the Anglo-Scotian Mills and Humber Works are now practically sub-let, and owing to this sub-division into separate tenements or factories, much difficulty has arisen with regard to providing the necessary sanitary accommodation, and also in the provision of adequate exits in the case of fire. This has now been satisfactorily accomplished, the owners proving themselves most willing to fall in with any of our suggestions. Twenty-five written notices were sent, particulars of which will be found in the Table.

Workshops.—Sixty-three of these are now on the register, and have been inspected on an average three times during the year. Twelve written notices have been sent for trivial matters which have been immediately remedied. Special attention has been devoted to the 20 bakehouses (15 occupied) and the 8 slaughter-houses (7 occupied). With regard to the slaughter-house in Willoughby Street, this has been unoccupied for over two years, and from its close proximity to the adjoining house, I think the Council would be well advised to withdraw the license. The tendency of modern times is to do away with isolated slaughter-houses, and to provide in their stead public abbatoirs, removed from existing dwellings, and built on strictly hygienic lines. This would much facilitate meat inspection, and lessen the labours of your officials. In the case of the bakehouses we have had to make frequent complaints of the accumulation of flour and dirt under the flour bins. To obviate this nuisance all bins should be on castors to enable them to be readily moved away from the adjoining walls. The surroundings of one of the bakehouses are not compatible with perfect cleanliness, being sandwiched between a slaughter-house and stable. The yard too, is dirty with pools of evil smelling manure impregnated water. Beyond the want of an occasional coat of lime wash the other bake-houses were in a satisfactory condition.

I might here mention that failure to give notice to H. M. Factory Inspector of occupation of any premises to be used as a factory or workshop is punishable under the Factory and Workshops Act. The necessary notices may be obtained from the Sanitary Inspector at the Public Offices.

Outworkers.—There are no less than 171 outworkers in Beeston. Our chief concern with these is to see that the premises are clean, and that no work is done in houses where an infectious disease exists. It has recently come to our knowledge that some of the outworkers sublet their work to others, and we have thought it desirable to send a notice to every outworker pointing out that this is a punishable offence, and must be discontinued unless due notice is sent to the Sanitary Inspector.

Appended are the usual Local Government Board Tables.

In conclusion, I desire to express my thanks to the members of your Council for their kindness and courtesy to me during the year. I also wish to express my special indebtedness to your Surveyor and Sanitary Inspector, Mr. E. A. Bush, for information supplied by him necessary for this Report, and to Mr. Kirkland for particulars of rateable and assessable values, &c.

I am, Gentlemen,

Yours faithfully,

FRANK ROTHERA. M.D.



TABLE I.

BEESTON URBAN DISTRICT.

Vital Statistics of Whole District during 1911 and previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.				
		Uncorrected Number.	Nett.		No.	Rate, 7	8 Of Non- residents in the District.	9 of Residents not registered in District.	Under 1 Year of Age			At all Ages.	
			No.	Rate.					No.	Rate per 1,000 Nett Births.	No.	Rate.	
1	2	3	4	5	6				10	11	12	13	
1906	11533	278		24.1	118	10.2		13	41	147.4	131	11.3	
1907	12046	323		26.8	141	11.7		18	27	83.5	159	13.7	
1908	11844	317		26.7	111	9.3		19	32	100.	130	10.9	
1909	11286	279		24.7	99	8.7		15	26	91.3	114	10.1	
1910	11817	309		26.1	117	9.9		13	32	103.5	130	11.0	
1911	11341	299	304	26.8	118	10.4		20	30	98.6	138	12.1	

Area of District in acres (exclusive of area covered by water)

1,586

Total population at all ages..... 11,341
 Number of inhabited houses..... 2,728
 Average number of persons per house... 4 $\frac{1}{4}$

At Census of 1911.

TABLE II. Cases of Infectious Disease during the Year 1911.

Name of District, Beeston, (Notts.)

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							Total cases removed to Hospital.
	At all Ages.	At Ages—Years.						
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	
Small-pox	0							
Cholera	0							
Diphtheria (including Membranous Croup	5		1	3	1			
Erysipelas	1						1	
Scarlet fever	23		5	14	3	1		2
Typhus fever	0							
Enteric fever	6				2	4		4
Relapsing fever	0							
Continued fever	0							
Puerperal fever	0							
Plague	0							
Phthisis {	Under Tubercu- osis Regulations, 1908	1				1		
	Under Tubercu- losis Regulations 1911	5			1	2	2	
	Others							
Totals	41	0	6	17	7	8	3	6

Isolation Hospital--Name and Situation: The Rushcliffe Hospital, Hucknall Torkard.

Total available beds, 12 to 20.

Number of Diseases that can be concurrently treated: Small-pox only.

TABLE III. Causes of, and Ages at Death during the Year 1911.

Name of District, Beeston, (Notts).

CAUSES OF DEATH.		Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.								
		All ages.	Under 1 year.	1 and under 2 yrs.	2 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.	45 and under 65 yrs.	65 and upwards.
I		2	3	4	5	6	7	8	9	10
All causes	Certified ...	133	29	5	9	5	7	17	25	36
	Uncertified ...	5	1					1	1	2
Enteric Fever	...	2					1	1		
Small-pox	...	0								
Measles	...	0								
Scarlet Fever	...	0								
Whooping Cough	...	3	2	1						
Diphtheria and Croup	...	1				1				
Influenza	...	1							1	
Erysipelas	...	0								
Cerebro-Spinal Fever	...	0								
Phthisis (Pulmonary Tuberculosis)	...	9		1			2	2	4	
Tuberculous Meningitis	...	1				1				
Other Tuberculous Diseases	...	5	1		3	1				
Rheumatic Fever	...	0								
Cancer, malignant disease	...	10						2	8	
Bronchitis	...	13	2					3		8
Broncho-Pneumonia	...	9			3			1	1	4
Pneumonia (all other forms)	...	1								1
Other diseases of Respiratory organs	...	1			1					
Diarrhoea and Enteritis	...	16	11	2	1					2
Appendicitis & Typhlitis	...	0								
Alcoholism	...	0								
Cirrhosis of Liver	...	0								
Nephritis and Bright's Disease	...	9			1	1	1	1	2	3
Puerperal Fever	...	0								
Other accidents and diseases of Pregnancy and Parturition	...	2					1	1		
Congenital Debility and Malformation, including Premature Birth	...	11	11							
Violent Deaths, excluding Suicide	...	5	1				2	1	1	
Suicides	...	0								
Heart Disease	...	7				1		2	2	2
Apoplexy	...	6							2	4
Other Defined Diseases	...	20	1	1				3	4	11
Diseases ill-defined or Unknown	...	1								1
		133	29	5	9	5	7	17	25	36

TABLE IV. INFANT MORTALITY. 1911.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.		Under 1 week.	2 and 3 weeks.	Total under 1 month	1 and 3 mths.	3 and 6 mths.	6 and 9 mths.	9 and 12 mths.	Total deaths under 1 year.
All causes	Certified	5	2	7	5	10	4	3	29
	Uncertified							1	1
Small-pox ...								1	1
Chicken-pox ...									
Measles ...									
Scarlet Fever ...									
Diphtheria and Croup						1		1	2
Whooping-cough ...					2	7	2		11
Diarrhoea ...									
Enteritis ...									
Tuberculous									
Meningitis ...									
Abdominal									
Tuberculosis ...						1			1
Other Tuberculous									
Diseases ...						1		1	2
Congenital									
Malformations...									
Premature birth ...		5	1	6	1				7
Atrophy, Debility and									
Marasmus ...					1				1
Atelectasis ...									
Injury at birth ...									
Erysipelas ...									
Syphilis ...									
Rickets ...									
Meningitis									
(not Tuberculous)									
Convulsions ...							2		2
Gastritis ...									
Laryngitis ...									
Bronchitis ...			1	1				1	2
Pneumonia (all forms)									
Suffocation, overlying					1				1
Other causes ...									
		5	2	7	5	10	4	3	29

Nett Births in the year { legitimate 289.
illegitimate 15.

Nett Deaths in the year of { legitimate infants 26.
illegitimate infants 4.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1911, FOR THE URBAN DISTRICT OF BEESTON, (Notts.),

On the Administration of the Factory and Workshop Act, 1901,
in connection with
FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors
of Nuisances.

Premises.	Number of			
	On Regis- ter.	Inspe- ctions.	Writ'n N'tic's	Prosecu- tions.
FACTORIES (Including Factory Laundries)	50	150	25	0
WORKSHOPS (Including Workshop Laundries)	63	190	12	0
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report	0	0	0	0
Total	113	340	37	

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	Number of Defects.			Num-ber of Prose-cu-tions.
	Found	Reme-died.	Referred to H.M. Inspector	
NUISANCES UNDER THE THE PUBLIC HEALTH ACTS:—				
Want of cleanliness	8	8		
Want of ventilation	0	0		
Overcrowding	0	0		
Want of drainage of floors	0	0		
Other nuisances	6	6		
Sanitary } Insufficient... ..	6	6		
accommodation. } Unsuitable or defective	1	1		
	4	4		
OFFENCES UNDER THE FACTORY AND WORK-SHOP ACT:-				
Illegal occupation of underground bake-house (s. 101)	0			
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	0			
Other offences				
(Excluding offences relating to outwork which are included in Part 3 of this Report)	0			
Total	25	25		

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.							Outw'k in Infected premi's, Secti'ns 109, 110.
	Lists received from Employers.							
	Sending twice in the year.			Sending once in the year.			Notices served on Ocpi'rs as to keeping or send- ing lists.	
	Lists.	Outworkers.		Lists.	Outworkers.			
		Contr- actors	Work- men.		Contr- actors.	Work- men.		
Lace, lace curtains & nets	28	2	97	14	3	74	100	1

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.						Number.
Important classes of work- shops, such as workshop bakehouses, may be enu- merated here.	Bakehouses (5 unoccupied)	...	...	...	...	20
	Slaughter-houses (1 unoccupied)	...	...	...	...	8
	Tailors' Workshops	...	...	...	...	3
	Dressmakers	...	...	...	...	7
	Plumbers	...	...	...	...	6
	Builders and Joiners	...	...	...	...	9
	Painters and Decorators	...	...	...	...	7
	Various	...	...	...	...	3
Total number of workshops on Register						63

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	I
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	10
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	0
Other	0
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	0
In use at the end of the year	0

PHTHISIS: SANATORIUM AND HOSPITAL ACCOMODATION.

Name of District—BEESTON, NOTTS.

Classes for which accomodation is provided.	By whom provided.
(a) Early cases.	Nil
(b) Intermediate cases.	Nil
(c) Advanced cases.	Nil

Have the Council, or any Private Body, provided a Dispensary. If so, give particulars. } No.

(Signed) FRANK ROTHERA, M.D.,

February 28th, 1912.

Medical Officer of Health.

FRANK ROTHERA.